



EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

OCA 2826-89

August 9, 1989

*Leg*

LEGISLATIVE REFERRAL MEMORANDUM

TO: Legislative Liaison Officer:

STAT

United States Trade Representative - Joshua Bolten  
(395-3150)  
Department of Agriculture - Marvin Shapiro (382-1516)  
Department of Defense - Samuel Brick (697-1305)  
Department of Commerce - Joyce Smith (377-4264)  
Department of Labor - Seth Zinman (523-8201)  
Department of the Treasury - Carole Toth (566-8523)  
Department of State - Bronwyn Bachrach (647-4463)  
Central Intelligence Agency -   
Overseas Private Investment Corporation - Bruce Hatton  
(457-7012)  
Export-Import Bank of the United States - Frank Record  
(566-8967)

SUBJECT: Draft Department of Commerce report on National Trade  
Data Bank.

NOTE: A list of your agencies' representatives to a working  
group on this matter is attached.

The Office of Management and Budget requests the views of your  
agency on the above subject before advising on its relationship  
to the program of the President, in accordance with OMB Circular  
A-19.

A response to this request for your views is needed no later than  
**Wednesday, August 16, 1989.**

Questions should be referred to Paul Bugg (395-3093).

*James J. Jukes*  
James J. Jukes for  
Assistant Director for  
Legislative Reference

Enclosures

cc: Tom Dorsey	Dave Edwards	Nancy Schwartz
Steve Farrar	Frank Reeder	Connie Bowers
Annette Rooney/Sue Thau		

Attendees - May 3, 1989 NTDB ITDAC Meeting  
(\* mailed interim report to Congress for comments - 7/18/89)

**United States Trade Representative**

Mr. Barry Goldberg                      Tel.: 395-5140  
Director, Computer Operations  
Office of the U.S. Trade Representative  
Washington, D.C. 20506

(nominated by Holmer, Acting USTR Rep.)

Address on envelope: Rm. 522A, Winder Bldg.  
600 17th Street, NW

(Mr. Goldberg no longer at USTR -

Mr. Richard F. Kristobek      \*      Tel.: 395-4990  
Deputy Director, Information Systems

Bernard Ascher

**Department of Agriculture**

Mr. John E. Riesz      \*              Tel.: 447-7233  
Assistant Administrator  
Foreign Agricultural Service  
U.S. Department of Agriculture  
Washington, D.C. 20250

(nominated by Kay, Administrator, USDA)

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**Department of Defense**

Mr. Richard E. Donnelly      \*      Tel.: 695-7458  
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(Manufacturing and Industrial Programs)  
Room 3B253 The Pentagon  
Washington, D.C. 20301

(Taft nominated Robert C. McCormack, Deputy Under Secretary of Defense (Industrial & International Programs) - tel # 697-4172

Dan Dennison

**Department of Commerce**

J. Antonio Villamil

Also attending:

Michael Darby

John E. Cremeans

Alan Balutis \*

Robert Ellert \*

Paula Muroff \*

Kenneth Rogers \*

Carol Carson \*

Reed Phillips \*

**Department of Labor**

Mr. William G. Barron \* Tel.: 523-1092

Deputy Commissioner of Labor Statistics

U.S. Department of Labor

Washington, D.C. 20210

Address on envelope: Rm. 2136, GAO Bldg.  
441 G Street, N.W.

(Janet Norwood designated rep. - she attended other meetings)

Anthony Barkume

**Department of the Treasury**

Charles Schotta

Mr. Ashby McCown \* Tel.: 566-5473

Director, Office of Data Management

U.S. Department of the Treasury

Washington, D.C. 20220

(designated rep. - re telephone call to C. Carson)

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Main Treasury Bldg.

**Department of State**

Mr. Jack Tucker                      \*            Tel.: 647-3205  
International Economist  
U.S. Department of State  
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(no response from State re NTDB rep.)

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Karen Benjamin

**Office of Management and Budget**

Dr. Hermann Habermann            \*            Tel.: 395-3093  
Chief, Statistical Policy Branch  
Office of Management and Budget  
Washington, D.C. 20503

(Habermann rep. to ITDAC)

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**Central Intelligence Agency**

OIR/CSD/ESPB  
Central Intelligence Agency  
Washington, D.C. 20505

(no official response re rep to ITDAC)

**Federal Reserve Board**

Mr. Edwin M. Truman                \*            Tel: 452-3614  
Director, Division of International Finance  
Federal Reserve Board  
Washington, D.C. 20551

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### **International Trade Commission**

Dr. John Suomela \* Tel.: 252-1216  
Director, Office of Economics  
U.S. International Trade Commission  
Washington, D.C. 20436

(designated rep to NTDB by Chairman)

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500 E Street, S.W.

### **Export-Import Bank**

Mr. James C. Cruse \* Tel.: 566-8861  
Vice President for Policy and Planning  
Export-Import Bank of the United States  
Washington, D.C. 20571

(designated rep to NTDB by First Vice Pres.)

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811 Vermont Avenue, N.W.

### **Overseas Private Investment Corporation**

Mr. Daniel W. Riordan \* Tel.: 457-7091  
Director, Corporate Information Systems  
Overseas Private Investment Corporation  
Washington, D.C. 20527

(Hatton was orig. designatee - Riordan attended meetings.)

Address on envelope: Rm. 361  
1615 M Street, N.W.

**INTERIM REPORT TO CONGRESS**

As required by Sec. 5413,  
Omnibus Trade and Competitiveness Act of 1988

**Actions taken pursuant to Subtitle E, Title V of the Omnibus Trade  
and Competitiveness Act of 1988**

August 3, 1989

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Perspectives; Current Situation; Future Outlook

## INTERIM REPORT TO CONGRESS

As required by Sec. 5413,  
Omnibus Trade and Competitiveness Act of 1988

**Actions taken pursuant to Subtitle E, Title V of the Omnibus Trade and Competitiveness Act of 1988:**

### General:

A National Trade Data Bank (NTDB) Planning Committee comprised of Department of Commerce representatives of the International Trade Administration, the Office of Economic Affairs, the Office of Administration, the Office of the General Counsel, and the National Institute of Standards and Technology was established by Deputy Secretary Donna Tuttle and first met on October 7, 1988. Users' needs, systems requirements, data bank content and structure, and public outreach and dissemination were studied and evaluated by the Committee. On December 16, 1988, a concept and implementation plan for the data bank proposed by the Office of Economic Affairs was adopted by the Committee and the Office of Economic Affairs was given lead agency responsibility for the NTDB.

The selected concept, called the "warehouse" system, calls for the collection of the needed data in one central computer system under Departmental control and preparation of these data for distribution on "Compact Disk-Read Only Memory" (CD-ROM) laser disks and other media. Distribution to the public will be through State and local economic development agencies, Federal Depository Libraries, nonprofit organizations, private information vendors, and Departmental field offices, as required by the Act. The Department will develop the minimum software required for the distribution of the data and will encourage the private sector to "add value" and to develop software that will permit analysis by end users.

Presentations of the warehouse system concept and the plans for the NTDB were held with more than twenty groups including those arranged by the National Governors Association, the Foreign Trade Data Users Group, the American Library Association, the Association for University Business and Economic Research, the Information Industry Association, the National Association of State Development Agencies, the International Cultural Trade Center, the Census Advisory Committees of the American Economic Association and the American Marketing Association, the Council of Professional Associations on Federal Statistics, and others. The plan was also presented to representatives of the Federal agencies represented

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on the Interagency Trade Data Advisory Committee (ITDAC). Comments on the plan from these groups were favorable. Some groups asked that distribution of magnetic tapes and Compact Disk-Read Only Memory (CD-ROM) disks be free to libraries and other nonprofit groups.

An informal coordinating committee, the "NTDB Interagency Planning Group" was established, comprised of representatives of the 12 agencies of the ITDAC plus representatives of the Bureau of the Census, the Bureau of Economic Analysis, the U.S. & Foreign Commercial Service and the Office of Trade Information and Analysis of the Department of Commerce. That committee met on March 20, 1989 and on June 27, 1989 to discuss NTDB matters including the development of standard data input record layouts and specific data sets to be included in the NTDB. This group has served to keep the contributing agencies informed of developments in the NTDB and to give the Department an informal channel for advice and comment from technical experts in the agencies.

The Interagency Trade Data Advisory Committee (ITDAC), set up by the Trade Act to advise the Secretary of Commerce on matters affecting the NTDB, was established by Secretary Robert A. Mosbacher and met first on May 3, 1989 to advise the Secretary on plans for the NTDB, in particular on a proposed Federal Register notice which set forth the concept of the NTDB for public comment. Under Secretary for Economic Affairs Designate Michael R. Darby opened the meeting and Chief Economist J. Antonio Villamil chaired the meeting. Minutes are attached.

On May 5, 1989, Secretary Mosbacher identified the establishment of the National Trade Data Bank as a Departmental objective in a letter to Richard Darman, Director of the Office of Management and Budget.

The Federal Register notice reviewed by the ITDAC was rewritten to include comments from the ITDAC and the revised notice was published in the Federal Register on \_\_\_\_\_, 1989. The public was given until \_\_\_\_\_ to comment on the plan. A copy of that notice is attached.

Many of the technical details of the NTDB are being worked out. Draft standardized formats for the input data have been developed and sent to the contributing agencies for review. A tentative data base structure has been designed and a rudimentary data base in the DB2 language has been set up to test the structures. Rough draft Structured Query Language specifications for the mainframe software have been prepared and basic search procedures for the CD-ROM's have been designed. Finalization of

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these details will await public response to the Federal Register notice.

Actions taken to provide the information on services as described in Section 5408:

**Sec. 5408(a)** SERVICE SECTOR INFORMATION.--The Secretary shall ensure that, to the extent possible, there is included in the Data Bank information on service sector economic activity that is as complete and timely as information on economic activity in the merchandise sector.

Many improvements in data on services are planned or in preparation. (See the attached paper, "Service Sector Information.") Every effort will be made to continue improvements. However, the fundamental nature and characteristics of services, the differences in the manner in which they are delivered, and the way in which they are measured severely limit the extent to which data bank information on economic activity in the service sector can be as complete and timely as information on activity in the merchandise sector. The Department will continue to seek opportunities to improve service sector information.

**Sec. 5408(b)** SURVEY.--The Secretary shall undertake a new benchmark survey of services transactions, including transactions with respect to:

- (1) banking services;
- (2) information services, including computer software services;
- (3) brokerage services;
- (4) transportation services;
- (5) travel services;
- (6) engineering services;
- (7) construction services; and
- (8) health services

The Bureau of Economic Analysis (BEA) has carefully re-examined survey techniques and other means to improve data on the eight services. It has concluded that a survey covering all eight services would not be feasible or produce useful results because the services are heterogeneous with respect to their nature, to the kinds of entities likely to have transactions, to sources of

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available information, and more useful data can be obtained using other collection methods. (See the attached paper, "Service Sector Information.") For some of the services, information is already being collected by BEA or another Government agency. For others, a Government survey is not an appropriate vehicle for obtaining information; for some of these services BEA now uses information from other sources to develop estimates using indirect methods. The Department recommends that the use of the measurement technique most appropriate to each service be permitted.

**Sec. 5408(c)(1)** The Secretary shall provide--... not less than once a year, comprehensive information on the service sector of the economy;

BEA is developing a data set that will bring together as much detailed information on international services as is possible. This data set will be included in the National Trade Data Bank (NTDB) and will also be provided to the public through an annual publication. Most of the information is already being published, but making it available through the NTDB and in a new publication will make the information more useful by providing it in one place.

**Sec. 5408(c)(2)** The Secretary shall provide--...an index of leading indicators which includes the measurement of service sector activity in direct proportion to the contribution of the service sector to the gross national product of the United States.

BEA, which prepares the index of leading indicators, has tested potential indicators of service sector activity and has concluded that the implementation of this provision of the act would undermine the usefulness of the index of leading indicators. The purpose of the index of leading indicators is to provide advance warning of cyclical turning points in the economy. The Bureau found that data on services do not contain much cyclical variation and that the inclusion of such data would reduce the ability of the index to signal cyclical turning points. BEA is investigating alternative ways to include more fully service sector activity in the system of business cycle indicators. One possible way is to present a separate index for services in the monthly Business Conditions Digest. The Department recommends that such an alternative method of providing indicators for services be permitted.

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Actions taken to provide State-by-State information as described in section 5406(b)(7):

**Sec. 5406(b)(7) ESTABLISHMENT OF THE DATA BANK.**

... within 2 years after the date of the enactment of this act, the Secretary of Commerce shall establish the Data Bank ... the Data Bank shall consist of two data systems, to be designated the International Economic Data System ...

(b) INTERNATIONAL ECONOMIC DATA SYSTEM.--The International Economic Data System shall include current and historical information determined by the Secretary to be useful (after the consultation required by section 5404) to policymakers and analysts concerned with international economics and trade and which shall include data compiled or obtained by appropriate executive agencies. Such information shall not identify parties to transactions. Such information may include data for the United States and countries with which the United States has important economic relations including--

(7) import and export data for the United States on a State-by-State basis aggregated at the product level including-- (A) data concerning the country shipping the import, the State of first destination, and the original port of entry for imports of goods and, to the extent possible, services; and (B) data concerning the State of the exporter, the port of departure, and the country of first destination for export of goods and, to the extent possible, services.

Many improvements in data on imports and exports are planned or in preparation (see the attached paper, "Census State-By-State Foreign Trade Data: Historical Perspectives; Current Situation; Future Outlook"). On March 1, 1989, the Census Bureau announced that state-by-state export data will be made available on a regular basis and at a lower price than in the past.

These data are now available in three magnetic tape series: The first series, entitled State of Export provides for each state, the value of exports by 2-digit SIC by country of destination. The

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second series, entitled Region of Export, provides for each region the value of exports by 4-digit Standard International Trade Classification (SITC). The third series, entitled Port of Export, provides the total value of exports by State, by port of export and country of destination.

These data, however, only partially satisfy the requirements of the Act. They provide data about exports but not about firms that are engaged in exporting. For example, exports are credited to the state where the export shipment began its journey; this may not necessarily be the state where the exporter is located. More detailed information on exporters of goods as described in Sec. 5406(b)(7), including the State of the exporter (origin) will be made available, to the extent that disclosure of information is not prohibited, when resources are available.<sup>1</sup> Similar information on imports and exports of services is not available for reasons discussed above under Sec. 5408 and in the paper "Service Sector Information," attached.

Although state-related data about exporters are now reported on the Shipper's Export Declaration, no funds are included in the President's budget to key and process the data. The Census Bureau has unsuccessfully requested funds for this work in each fiscal year since 1987.

The U.S. Customs Service document CF 7501, which is the source of official statistics on merchandise imports, currently does not require the reporting of the state of destination of the merchandise. As in the case of exporters, no funds are available to process this information if it does become available.

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<sup>1</sup> The House and Senate Compromise (Conference) Section 5406 p. 969-70, states, "It is the conferees' intent that, where practical, both the export and import data are to be provided at the 7-digit SIC code product level." It should be noted that, since January 1989, import and export data on goods have been reported using the Harmonized Commodity Description and Coding System. There are concordance tables between the 10-digit harmonized system and the 7-digit SIC-based product codes that may be used to relate imports and exports to domestic production. The harmonized codes provide for about 5000 commodity classifications at the 6-digit level used for international comparison of trade data. There are 8000 export commodity classifications and 15,000 import commodity classifications at the 10-digit level of detail in which the data are reported which should provide good detail for many purposes.

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Issues and Plans:

- o The Department anticipates a problem in pricing NTDB products as required by Section 5412 "Fees and Access," of the Act and will propose a technical correction.

Section 5412 states in part, "The Secretary .... may charge reasonable fees consistent with section 552 of title 5, United States Code," the "Freedom of Information Act." The Department, after obtaining legal opinion, believes that to be consistent with section 552 it will be necessary to incorporate cumbersome features to allow the Department to assess fees based on the nature of the entity requesting the data, will require the Department to make the data available to the public at a price below the cost of dissemination, and will make it difficult to provide copyrighted data from international organizations through the data bank.

The Department will recommend that Section 5412 be amended to remove the reference to fees consistent with the Freedom of Information Act and allow reasonable fees consistent with current authority under 15 U.S.C. 1525. Although enactment of this legislative proposal will increase the cost of obtaining information from the NTDB, these costs will still be modest. Users would benefit because the Department would be able to publish prices and procedures for NTDB products that would apply consistently to everyone. A small royalty to cover the cost of copyrighted data from international organizations such as the IMF and OECD would be included, but users would benefit by having access to multi-lateral trade data not available through standard Federal statistical sources. Taxpayers would benefit because the actual costs of dissemination would be covered by the fees rather than by appropriated funds.

- o Another problem is the potential budget effects of the NTDB on agencies supplying data to the NTDB.

The Federal agencies supplying data to the NTDB will be required to convert their data into standard formats for input into the NTDB and will therefore have to prepare software for the purpose. In addition, some NTDB-data-supplying agencies now sell those same data in electronic form; revenues may be lost as those data are sold through the NTDB. In both cases additional funding through the budget process may be required.

- o The Department intends, with the advice of the Interagency Trade Data Advisory Committee, to issue a Federal Register notice outlining the data content of the NTDB in the fall.

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Attachment 1

MINUTES OF THE  
INTERAGENCY TRADE DATA ADVISORY COMMITTEE  
MEETING, MAY 3, 1989

I WELCOME AND INTRODUCTIONS:

The first meeting of the Interagency Trade Data Advisory Committee (The Committee), established by the Omnibus Trade and Competitiveness act of 1988, Subtitle E, was called to order at 2:00 PM Wednesday, May 3, 1989 by John E. Cremeans, Chairman of the National Trade Data Bank's (NTDB) Implementation Working Group of the Department of Commerce in room 1414 of the Herbert C. Hoover Building. Mr. Cremeans introduced Dr. Michael R. Darby, Under Secretary/Designate for Economic Affairs of the Department of Commerce.

Dr. Darby noted that he had not yet been confirmed and would, therefore, not participate directly in the first meeting of the Committee. The new team at the Commerce Department fully supports the NTDB and believes the project to be important and worthwhile. The purpose of the first meeting of the Committee is to permit its members to advise the Secretary of Commerce on the establishment, content, and operation of the NTDB. The Department of Commerce has been given the direct responsibility in the National Trade Data Bank, but will not forget that it is a cooperative venture that can succeed only with the help, advice, and active support of the members of the Committee.

Dr. Darby introduced Dr. J. Antonio Villamil, Chief Economist of the Department of Commerce, as the Secretary of Commerce's designated representative to the Committee. Dr. Darby noted that Dr. Villamil had been sworn in eight days earlier.

The members of the committee then introduced themselves. (See attached list of Committee members attending.)

II Current Status of the NTDB

Mr. Cremeans reviewed the current status of the NTDB project using a two page handout (attached). This review was a summary of the information contained in the proposed Federal Register notice.

### III The Proposed Federal Register Notice on the Systems Concept of the NTDB

Mr. Cremeans noted that the information in the proposed Federal Register notice had been presented to many groups of suppliers and potential users and that a list of those groups was included in the package of information given the participants (attached). He also pointed out that there were changes in the draft notice on pages 3 and 13: 1. (p. 3) the section on content was expanded to make the procedure for determining the content of the NTDB more explicit and 2. (p. 13) a new section, "Resource and Budget Constraints," was added. These changes were made in response to suggestions from the member agencies.

Members of the Committee were then asked for comments, suggestions, or advice to the Secretary on the proposed Federal Register notice.

Mr. Hermann Habermann (OMB representative) asked why only 30 days was allowed for response and asked if it would not be better to allow 60 days.

Mr. Cremeans responded that 30 days was thought to be sufficient given that the Department had made a concerted effort to brief all interested parties and that no substantive objections had been received. Also, it was important to receive and respond to comments as early as possible because the Department hopes to award a software contract in FY 89; a 60 day response time might make it impossible to let a contract in time. Finally, the Department would consider extending the time to respond if requests to extend were received after the notice is published.

No other comment, suggestion, or advice was received on the proposed Federal Register notice.

### IV COST AND FUNDING:

Mr. Alan Balutis, Director, Budget, Planning and Organization, Department of Commerce, discussed cost and funding. His major points were:

- o The Department recognizes that the NTDB has budget implications for its own data contributing agencies (Census, ITA and BEA) in addition to the general start-up costs for the NTDB. The other agencies will have similar data conversion costs.
- o The Department has very modest funding in the proposed FY 90 budget (\$425,000) for the direct cost of the data bank system. The Department is expected to submit requests for



funding for development and data conversion in the FY 91 budget cycle and we expect that other agencies will as well.

- o Member agencies may want to send the Department copies of their submissions so that it can support their requests and facilitate a cross-cutting review of the NTDB project by OMB.
- o The Department is, of course, working on the NTDB in FY 89 and will put as much effort into the project as possible in FY 90.

Mr. Bernard Ascher (representing the U.S. Trade Representative) noted that section 5408 of the Act requires that a new benchmark survey of service transactions be conducted. He also noted that the House and Senate Compromise (Conference) report on Section 5408 included the statements:

It is the intent of the conferees that the survey called for in this provision be an expansion and continuation of the BE-20 benchmark survey currently being conducted by the Bureau of Economic Analysis, not a replacement for or survey in addition to BE-20. The conferees are, however, deeply concerned that the surveys required under existing laws have not been given adequate priority to meet statutory deadlines. The conferees expect the requirements of this section to be complied with expeditiously.

Mr. Ascher asked what the plans were for this part of Subtitle E.

Mrs. Carol Carson, Deputy Director of the Bureau of Economic Analysis, responded:

The work of expanding and continuing the BE-20 benchmark survey conducted by the Bureau of Economic Analysis has focused on the BE-22 annual follow-on survey. (The annual survey has collected data for 1987 and 1988; results for 1987 will be incorporated in BEA's June revision of the balance of payments accounts, and results for 1988 will be available later in the year.) In addition, BEA is working with an Interagency Task Force to determine how best to obtain better information on banking and other financial services not covered in the BE-20 and BE-22. In BEA's work on international services, respondent burden as well as budget are major constraints.

Mr. William Baron, (Labor Department representative) suggested that the Department should send each member agency a copy of its budget assumptions vis a vis the NTDB.

Mr. Balutis agreed that coordination would be very helpful.

Mr. Hermann Habermann (OMB representative) suggested that the

actual data to be supplied, the precise data formats to be used, and other details of the data bank would have to be worked out and perhaps placed in writing before accurate budget estimates could be made.

Mr. Cremeans replied that many of those details were being worked out in meetings between the Department and the supplying agencies and that he hoped that the necessary information would be available in time for the budget cycle.

## V PLANS

Mr. Cremeans discussed plans for the implementation of the NTDB in the near future. His major points were:

### o CONTENT-

- . The current Federal Register notice briefly outlines a procedure for determining the content of the NTDB; a second Federal Register notice later this year is proposed to set out the initial desired content of the NTDB in terms of general categories, e.g., Balance of Payments data from BEA; International Labor Statistics from BLS, for public comment.
- . Each member agency will receive a formal request in the next month or two that will set out the Department's understanding of the requirements as established by the Act and will suggest categories of data that would be needed from each agency. Each member agency will be asked to provide a thoughtful selection of data from their collections that should be included in the NTDB.

### o REPORT TO CONGRESS-

- . The Act requires the Secretary, with the advice of the Committee, to submit an interim report to Congress on the NTDB by August 23, 1989.
- . The Act requires explicit information on the Department's progress on information on the service sector (Sec. 5408) and on exports state-by-state (Sec. 5406(b)(7)).
- . In addition, the Congress will be given a summary of the basic dissemination plan as described in the Federal Register notice, a summary of the responses to that notice, a summary of efforts to consult with state and local governments, nonprofit organizations, and

other interested members of the public, and brief information on plans and problems as appropriate.

Draft copies of this report will be mailed to each member agency for comment and advice early in July.

#### CLOSING

Members of the Committee were thanked for their participation and advice. It was noted that the Department would continue to keep each member agency informed of day-to-day developments through the informal Interagency NTDB Planning Committee.

The meeting was adjourned at approximately 2:50 PM.

Kenneth W. Rogers  
May 5, 1989

**Representatives at the May 3, 1989 NTDB Meeting**

**United States Trade Representative**

Barry Goldberg  
Bernard Ascher

**Department of Agriculture**

John E. Riesz

**Department of Defense**

Richard E. Donnelly  
Dan Dennison

**Department of Commerce**

J. Antonio Villamil

**Also attending:**

Michael Darby  
John E. Cremeans  
Alan Balutis  
Robert Ellert  
Paula Muroff  
Kenneth Rogers  
Carol Carson  
Reed Phillips  
Edward Shore  
Donald Huber  
Ann Bacher

**Department of Labor**

William G. Barron  
Anthony Barkume

**Department of the Treasury**

Charles Schotta  
Ashby McCown

**Department of State**

Jack Tucker  
Karen Benjamin

**Office of Management and Budget**

Hermann Habermann

**Central Intelligence Agency**

STAT

**Federal Reserve Board**

Edwin M. Truman

**International Trade Commission**

John Suomela

**Export-Import Bank**

James C. Cruse

**Overseas Private Investment Corporation**

Daniel W. Riordan

Attachment 2

Federal Register notice

Note to reviewers: An original copy of the Federal Register notice will be attached here.

## Attachment 3

Service Sector Information<sup>1</sup>

## Bureau of Economic Analysis

This paper indicates what is being done, or what it would be practical to do, to provide information on U.S. international transactions in each of eight services for which a benchmark survey is required by Sec. 5408(b) of the Omnibus Trade and Competitiveness Act of 1988. The services are: (1) banking services; (2) information services, including computer software services; (3) brokerage services; (4) transportation services; (5) travel services; (6) engineering services; (7) construction services; and (8) health services. The Conference Report for the Act indicated that the survey is to "be an expansion and continuation of the BE-20 benchmark survey . . . , not a replacement for or survey in addition to the BE-20."<sup>2</sup> Appendix A illustrates the information now available on services and describe the most recent data improvements.

The major conclusion of the paper is that a survey covering all eight services is neither practical nor necessary. The services are heterogeneous with respect to their nature, to the kinds of entities likely to have transactions, to sources of available information, and more useful data may be obtained using other collection methods as appropriate. For some of the services, information is already being collected by the Bureau of Economic Analysis (BEA) or another Government agency. For others, a Government survey is not an appropriate vehicle for obtaining information; for some of these services, BEA now uses information from other sources to develop estimates using indirect methods.

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<sup>1</sup> Prepared as a supplement to the report to Congress on the National Trade Data bank.

<sup>2</sup> The BE-20 survey was a benchmark survey of selected services transactions between U.S. persons and unaffiliated foreign persons. Conducted by the Bureau of Economic Analysis for the year 1986, it collected information on 18 types of services, most of which had not been reported previously. An annual survey, the BE-22, is being used to obtain up-to-date information on the 18 types of services. The next BE-20 benchmark survey will be conducted for 1991.

Banking

Data needs in the area of banking services were addressed in 1988 in a report, by a work group on international banking and financial data, to the Interagency Task Force on Services Trade Data, which is chaired by the Office of the U.S. Trade Representative. Excerpts from the report are shown as Appendix B. The report noted that BEA now makes estimates for some noninterest receipts of banks and identified the Federal Financial Institutions Examination Council's Call Report as a possible source of additional information. It noted, however, that the data now collected in the Call Report on internationally related "noninterest income" of banks cannot be disaggregated by country and provide no information by type of service. Also, not all noninterest income is derived from the performance of services; some, including gains on foreign exchange, represents capital gains.

During deliberations by the full Task Force, the possibility of modifying or expanding the Call Report's questions on noninterest income to provide the necessary information on trade in services--for example, by providing a breakdown by country of transactor and type of service and by better distinguishing between service and nonservice items--was raised. However, representatives from the Federal Reserve Board indicated that expanding the Call Report in this way would be impractical because the Report is filed by thousands of banks, whereas only a few large banks account for the bulk of international trade in banking services.

Ultimately, the consensus within the Task Force was that, before a new survey was proposed or an existing one modified, a representative sample of large banks should be consulted. Consultations, together with the limited information already available, might provide the basis for estimates and would help lay the foundation for additional survey work, should it later be deemed necessary. Consultations are now being conducted by staff from BEA, the Board of Governors of the Federal Reserve System, and the Federal Reserve Bank of New York. When they are completed and the findings have been reported (probably in late 1989), a determination will be made of the method that should be used to obtain additional information. If a new survey is required, it probably should be directed only to those banks whose internationally related noninterest income exceeds a predetermined threshold. If indirect estimation is determined to be the best method, BEA will build upon the groundwork established by the consultations and develop methodologies for indirect estimates.



Information services, including computer software

Information services were covered by the BE-20 benchmark survey of selected transactions between U.S. persons and unaffiliated foreign persons and are covered by the annual follow-on survey, the BE-22. Computer software services were collected on the BE-20 survey as a component of computer and data processing services. For U.S. sales of computer and data processing services, two of the six categories collected pertained to software--(1) computer systems, analysis, design, engineering, and custom programming, and (2) software services, excluding custom programming.

Comments received from the business community during the design and clearance process for the annual BE-22 survey indicated that companies would ordinarily view the second category--which may be termed "general use" software--as goods and not services, particularly for purchases. General use software had been included on the BE-20 because merchandise trade statistics compiled by the Census Bureau have no separate product code for it and because it is required to be reported on the basis of the value of the media (e.g., diskettes or tapes) on which the software is recorded rather than on the sales price, which would also reflect the value of the information recorded on the media. Because of the comments by business, because the Census Bureau was contemplating a move to a market basis of valuation for exports (which account for most of the U.S. trade in general use software), and because market value often appeared to be reported in practice, general use software was not included in the annual BE-22 survey.

The Census Bureau is taking several steps to improve information on U.S. trade in general use software. It has included a proposal to require U.S. exports of such software to be reported at market value in a draft Notice of Proposed Rulemaking containing changes to the Foreign Trade Statistics Regulations (F TSR-15 CFR, Part 30); the proposal is being circulated among Government agencies for comment. Also, it plans to take up with the U.S. Customs Service the question of requiring that information on the market value of U.S. imports of general use software be reported. Finally, it plans to propose to the Committee for Statistical Annotation of Tariff Schedules, which is chaired by the U.S. International Trade Commission and includes representatives from the Census Bureau and the U.S. Customs Service, that a separate product code be provided for general use software.

To give added emphasis to information services, BEA will reconsider the exemption level for this service in connection with the 1991 BE-20 benchmark survey of selected services transactions. The BE-20 and BE-22 surveys now require reporting only of transactions exceeding \$250,000; voluntary reporting of smaller transactions, without geographic detail, is requested. Data

reported on a voluntary basis account for a much larger proportion of total transactions for information services than for most other services. This result, together with an investigation of fees charged by major on-line data base vendors, suggests that small (under \$250,000) transactions are not uncommon for this type of service. Lowering the exemption level would, at a minimum, provide better information on the geographic distribution of these transactions and would likely provide a more precise measure of total transactions as well.

### Brokerage services

This category may be interpreted broadly to refer, not just to brokerage, but to nonbank financial services generally. Underwriting, purchase, sale, or brokerage of securities and of other financial contracts are among the major types of services included. The category also includes services such as investment management and advice and arranging mergers, acquisitions, and buyouts. The above-mentioned report of the Interagency Task Force work group stated that " . . . no data for income from international trade in services are separately reported by U.S. investment banks or by other U.S. financial institutions, such as merchant banks, brokerage houses, or security dealers."

BEA now estimates payments and receipts of commissions and some other fees associated with securities transactions by multiplying the value of the transactions by estimated average rates. In contrast to banks, there is no existing survey of nonbank financial institutions that could be expanded to collect additional information on trade in services. The interagency team mentioned above is including these institutions in its consultations and its findings in this area, like those in the banking area, are being awaited before a determination of the best method of developing additional information is made. Given the absence of any existing Government survey that could be modified or expanded, the choice will likely be between strengthening BEA's indirect estimates or including a specialized survey of brokerage services in BEA's international survey program.

### Transportation services

Transportation, like banking and finance, has received scrutiny by a work group of the Interagency Task Force on Services Trade Data. Its report (excerpts are shown as Appendix C) identified information on transactions in international transportation services that are between residents of the same country and thus that are not included in the balance of payments as a major data need from the standpoint of trade policy users. These transactions include payments to U.S. carriers for carriage

of U.S. imports and to foreign carriers for carriage of U.S. exports. (Under balance of payments conventions, the former payments are assumed to be made by U.S. persons and the latter by foreign persons.) The report also noted that, in estimates of port services expenditures, goods (e.g., fuels) are often commingled with services (e.g., maintenance and repair), thus precluding isolation of the services component. Finally, it indicated that the geographic detail provided for transportation is limited.

BEA now conducts four surveys related to international transportation. They cover air and water transportation; separate forms are used for U.S. and foreign carriers. Information from other sources, including the Census Bureau, is also used in estimating transportation services transactions. Developing information on the transactions between residents of the same country would involve expanding or more fully exploiting these sources. Because obtaining information from foreign carriers has proved extremely difficult in the past, it is doubtful that the addition of questions to survey forms would result in reliable estimates of their receipts for carriage of U.S. exports. The general order of magnitude of these receipts might, however, be estimated using indirect methods in conjunction with information that already is available. U.S. carriers' receipts for carriage of U.S. imports, in contrast, can be estimated using existing information provided by the Census Bureau.

The inclusion of fuel in port services is a convention used in the international accounts of many countries and is the treatment recommended in the current edition of the International Monetary Fund's Balance of Payments Manual (paragraphs 271 and 272), which provides international guidelines for the compilation of balance of payments accounts. Sample information on port services is now collected in the BE-29 and BE-30 surveys. The former obtains information on foreign carriers' port service expenditures in the United States. Expenditures for fuel are collected separately and could provide the basis for an estimate of the portion of the total that is accounted for by fuel. The BE-30 provides sample data on U.S. carriers' port services expenditures overseas, but expenditures for fuel are not separately identified. If they were to be, adding a breakdown on type of port expenditure to the BE-30 similar to that requested on the BE-29 would be necessary.

Because the limitation on the geographic detail provided for transportation services stems in part from inherent difficulties in correctly identifying the country of the owners or operators of vessels registered in "flag of convenience" countries, it is not clear that it is possible to expand the country detail beyond that now provided.

To obtain additional information, to the extent practicable,

on transportation services, it would be necessary for BEA to expand existing surveys or to develop indirect estimates in areas not required for balance of payments purposes.

### Travel services

Statistics on travel services are based on information collected from individuals--mainly from questionnaires distributed to airline passengers. The major survey is conducted by the U.S. Travel and Tourism Administration (USTTA). BEA has just begun to use information from this survey in compiling the travel accounts of the U.S. balance of payments. In addition to the information on total expenditures needed by BEA for compiling the balance of payments, the USTTA survey also collects information on the types of expenditures travelers make, such as for food, lodging, and local transportation. However, the sample data on individual services are not expanded to universe estimates by either BEA or USTTA. Although they could be, in principle, numerous technical problems have been encountered in utilizing the USTTA sample data: Producing estimates for the individual services would be even more problematic and should not be attempted until more progress has been made in resolving these problems. Ongoing joint efforts toward this end by BEA and USTTA will continue.

### Engineering services and construction services

These services are discussed under the same heading because much of the information on both services is already being collected on the same survey--the BE-47, which covers U.S. sales to unaffiliated foreigners of architectural, engineering, construction, and mining services. The survey collects information on gross operating revenues and on U.S. exports and foreign outlays associated with projects involving these types of services. Recently, a question on contracts awarded was added to give an indication of probable future sales. The BE-20 and BE-22 surveys collect information on U.S. purchases of these services and on both sales and purchases of industrial engineering services (such as product design).

Although construction and engineering services are adequately covered by these surveys, a perception of inadequacy may have been created by the fact that some of the newer information collected, including that on gross operating revenues and contracts awarded, has not yet been published. This additional information from existing surveys will be included in the comprehensive information on the service sector of the economy to be provided pursuant to Sec. 5408(c) of the Act.

### Health services

Information on trade in health services comes from two sources. Management of health care facilities, both sales and purchases, is covered by the BE-20 and BE-22 surveys. Very little trade was reported under this category, largely because the services are usually provided to foreigners through affiliates, rather than through cross-border transactions.

Receipts from foreign medical patients seeking treatment in the United States have been included in the U.S. balance of payments accounts since June 1987, based on indirect estimation methods. These estimates were first published separately in June 1989. BEA plans to investigate the feasibility of including additional questions on existing Government surveys of hospitals in order to replace or strengthen the indirect estimates. However, the sensitivity of data on patient nationality and the difficulty providers may have in supplying the necessary information probably precludes survey information.

Information on U.S. payments for medical treatment abroad is not available, but the amounts involved are likely to be small in comparison to the receipts. Because such information would have to be collected either from foreign hospitals (which are beyond the reach of U.S. Government reporting requirements) or U.S. patients (who would be difficult to locate for reporting purposes), it is unlikely that a survey vehicle for obtaining the information would be practical.

## Appendix A: Recent Improvements to Data on International Services

The following material is excerpted from an article on U.S. international transactions that appeared in the June 1989 issue of the Survey of Current Business. "Technical Notes" describes the most recent improvements to BEA's data on international services. Table 3 shows the information now provided for services. Table F shows in detail the improvements in data on "other private" services transactions with unaffiliated foreigners.

### Technical Notes

As is customary each June, estimates of U.S. international transactions are revised to incorporate new source data and improved methodologies. Several major improvements were introduced this year.

(1) Other private service receipts and payments for 1986-88 incorporate the results of the recently completed benchmark and annual follow-on surveys of selected service transactions with unaffiliated foreigners. The new estimates, the culmination of one phase of a program to improve estimates of international service transactions, provide greatly expanded coverage of service transactions and much greater detail by type of transaction. The new estimates raise other private service receipts \$5,201 million and other private service payments \$3,088 million in 1988.

(2) Travel and passenger fare receipts and payments for 1984-88 incorporate results of a survey administered by the United States Travel and Tourism Administration (USTTA). The estimates replace those based on BEA surveys that had been discontinued and brought forward by interim estimation techniques. The new estimates raise travel and passenger fare receipts \$12,353 million and travel and passenger fare payments \$7,772 million in 1988.

(3) Estimates of foreign students' expenditures in the United States and U.S. students' expenditures abroad are incorporated for 1981-88. Previously, they had not been included in the accounts. The estimates are based on information about characteristics of the student populations and students' expenditures for tuition and other living expenses. The new estimates for education raise other private service receipts \$4,111 million and other private service payments \$555 million in 1988.

(4) Noninterest income earned by banks is reclassified from portfolio income receipts to other private service receipts beginning with estimates for 1986. The amount of income reclassified is \$1,995 million in 1988.

(5) Commissions on securities transactions are revised for 1987-88. Although the basic methodology introduced 2 years ago is unchanged, information on key parameters has been updated. The changes reduce commission payments \$401 million and reduce commission receipts \$126 million in 1988.

### *Other private services*

Estimates of other private service transactions with unaffiliated foreigners have been revised significantly. The results are presented along with other selected service transactions in table 3. Major improvements to other private services with unaffiliated foreigners include (a) coverage for the first time of many business, professional, and technical services, and improved measurement of telecommunications services and of insurance services (lines 20, 21, 22 and 43, 44, 45); (b) a reclassification of certain bank income from portfolio income to other private services (line 19); (c) coverage for the first time of education services (lines 18 and 41); and (d) an updating of key parameters used in the estimation of commissions on securities transactions. These and other improvements are discussed in the paragraphs that follow.

*Business, professional, and technical services.*—Estimates of many business, professional, and technical services for 1986-88 have been developed from a BEA benchmark survey for 1986 and annual follow-on surveys of selected service transactions with unaffiliated foreigners. The new surveys provide greater detail by type of transaction than was previously available and they expand coverage of receipts to such key areas as computer and data processing services; installation, maintenance, and repair of equipment; and management and consulting services (table F). The surveys also provide first-time coverage of payments for many types of services, presented by the same categories as for receipts. Estimates of telecommunications benefited from new survey data on channel leasing and enhanced services. Estimates of primary insurance, based largely on survey data, were prepared for the first time to supplement existing estimates of reinsurance transactions.<sup>1</sup>

*Reclassification of noninterest income of banks.*—Noninterest income of banks has been reclassified from portfolio income (table 1, line 13) to other private service receipts, where it is included as a component of financial services (table 1, line 9, and table 3, line 19). Noninterest income includes estimates for fees received by banks on bankers' acceptances, commercial letters of credit, standby letters of credit, undrawn funds under commitment, and items for collection. The reclassification was effected because this income was more similar

1. Estimates for 1986, developed from the benchmark survey, were first presented and discussed in detail in the October 1988 SURVEY OF CURRENT BUSINESS. These estimates—along with estimates for 1987 and 1988 developed from the annual follow-on surveys—are now incorporated into the accounts.

to other types of service income than to returns (interest earned) on portfolio investments. The coverage of the estimate is incomplete in that it does not include all types of fees, largely because source data that can be organized into a framework appropriate for the international accounts are not available. As part of financial services, noninterest income is combined with commissions and fees on securities and commodities transactions. The amount reclassified was \$1,995 million in 1988. No estimates of payments are included in the accounts at the present time because source data appropriate for the international accounts are not available.

**Royalties and license fees.**—Beginning in 1987, estimates of receipts and payments of royalties and license fees with unaffiliated foreigners are available by type of intangible property. The estimates, developed from the expansion of an existing survey, include royalties and license fees related to industrial processes; books, records, and tapes; trademarks; broadcasting and recording of live performances and events; and franchising (table G). Similar detail for transactions with affiliated foreigners is not available.

Beginning in 1986, certain management fees received from or paid to unaffiliated foreigners, amounting to less than \$25 million for receipts and less than \$5 million for payments, have been removed from royalties and license fees (table 1, lines 8 and 23) and have been included in other private services (table 1, lines 9 and 24, and table 3, lines 13 and 36).

**Repairs and alterations.**—The value of repairs and alterations of equipment physically exported from, and imported into, the United States was transferred (reclassified) from the merchandise trade accounts and added to estimates of the installation, maintenance, and repair of equipment in the other private service accounts.

**Expenditures and receipts of students.**—New estimates have been developed for foreign students' expenditures in the United States (receipts) and for U.S. students' expenditures abroad (payments) for 1981–88. No estimate of these transactions has previously been included in the accounts. Receipts are entered in other private services in table 1, line 9, and are shown separately in table 3, line 18. Payments are entered in other private services in table 1, line 24, and are shown separately in table 3, line 41.

For the estimates of *foreign students' expenditures in the United States*, foreign students are defined as individuals enrolled in institutions of higher education in the United States who are not U.S. citizens, immigrants, or refugees. The population of students is obtained from an annual survey of about 2,900 U.S. accredited institutions conducted by the Institute for International Education (IIE); the response rate is about 95 percent. Characteristics of the population used in the estimates include the geographic area of origin (residence), type of institution (public or private), enrollment status (part-time or full-time), and academic level of institution (2-year, 4-year, or university).

Estimates of expenditures for tuition and for room and board are developed from annual surveys of most accredited institutions, conducted by the College Board and adjusted by the Center for Education Statistics, U.S. De-

partment of Education, and matched by BEA to the characteristics of the student population. Data on living expenses are based on Bureau of Labor Statistics estimates of low-income level family budgets in metropolitan and nonmetropolitan areas, reduced to a single person and adjusted for inflation. These receipts are shown separately in table 3, line 18.

Other transactions in the current account partly offset these receipts. Surveys of the foreign student population by IIE indicate that most of their education is financed from sources abroad. A small amount of their education, however, is financed from sources within the United States—through scholarships from colleges, universities, private corporations, or other nonprofit institutions. These payments to foreigners are entered as private remittances in table 1, line 34. Financial contributions (grants) from the U.S. Government are already included in the accounts (table 1, line 32) and are not separately identifiable. In addition, wages earned from employment, also developed from the IIE survey, are entered in other private service payments, table 1, line 24.

The estimates of *U.S. students' expenditures abroad* are obtained in a manner similar to that for foreign students' expenditures in the United States. A student is defined as anyone who receives academic credit for studying abroad from an accredited institution of higher education in the United States. The population of students is obtained from a biennial survey of about 2,900 U.S. institutions conducted by the IIE; the response rate is about 65 percent. BEA makes an estimate of nonresponse to the survey. Characteristics of the population used in the estimates include country of study, type of institution (public or private), and academic level of institution in the United States (2-year, 4-year, or university).

Most students who earn academic credit abroad do so through a U.S. institution that has established a formal study abroad program with institutions of higher education abroad. The payments students make to U.S. colleges and universities for tuition and for room and board are assumed to be forwarded to the foreign institution. Estimates are developed from an annual survey of most accredited U.S. institutions conducted by the College Board and adjusted by the Center for Education Statistics, U.S. Department of Education. A small number of students who study abroad make their own arrangements with foreign institutions, yet they still receive academic credit from a U.S. institution. These students are assumed to pay the same tuition as those enrolled in a formal program of a U.S. institution. A separate estimate of living expenses for these students is developed by constructing a ratio between U.S. and foreign living costs, which then is multiplied by the low-income level family budget series developed for foreign students who study in the United States. Payments for both groups of students are shown separately in table 3, line 41.

The coverage of students in these estimates has been narrowly defined to include only those who receive academic credit from a U.S. institution. The estimates do not include students who may participate in study-abroad programs of U.S. institutions but who do not receive academic credit. Nor do the estimates include



those individuals who visit the United States or those U.S. residents who go abroad to study on a more casual basis. This student population is much larger than that discussed previously, and the expenditures and airfares paid are included indistinguishably in the travel and passenger fare accounts. In principle, overlap between the other private service accounts and travel and passenger fare accounts could occur, although current survey techniques for the travel and passenger fare accounts make it unlikely that any significant overlap exists in practice.

*Commissions on securities transactions.*—Commissions on securities transactions (table 1, part of lines 9 and 24, and table 3, part of lines 19 and 42) were revised for 1987–88 to reflect the general lowering of commission rates that has occurred in the past several years and to incorporate new information on transfer taxes abroad. For U.S. transactions in foreign securities, underwriting fees on new Eurobond issues were reduced, as were commission rates on foreign stocks. Some transfer tax rates on stock transactions abroad were reduced and others were introduced. Commission rates on transactions in Canadian securities were reduced to reflect a larger share of institutional trading relative to retail trading. For foreign transactions in U.S. securities, commission rates on U.S. stocks were reduced. These changes reduce U.S. payments \$401 million and reduce U.S. receipts \$126 million in 1988.<sup>2</sup>

#### *Travel and passenger fares*

Travel and passenger fare receipts (table 1, lines 5 and 6, and table 3, lines 2 and 3) and payments (table 1, lines 20 and 21, and table 3, lines 25 and 26) have been revised for 1984–88 to include the results of a new travel survey administered by the United States Travel and Tourism Administration (USTTA) and designed in part to meet balance of payments estimation needs. The survey is conducted aboard a randomly chosen sample of scheduled flights departing the United States of those U.S. and foreign flag carriers who voluntarily choose to participate in the survey. About 70 percent of the U.S. carriers and 35 percent of the foreign carriers participate. Sample results are expanded to universe estimates to account for nonresponse of passengers on each sampled flight, for coverage of all flights on each major airline route, and for all international routes. The basis for the expansion is the number of passengers departing the United States obtained from the Immigration and Naturalization Service (INS).

*Receipts.*—For U.S. travel receipts, average travel receipts from each major area or country overseas (defined to exclude Canada and Mexico), which are developed from the survey, are multiplied by the number of visitors from each major area or country, obtained from data from the INS. The sum of all major areas and countries is the estimate of overseas travel receipts. For those who travel on a tour package, only expenditures on land are included as travel receipts; the airfare paid to U.S. carriers is included in passenger fare receipts.

The procedure is similar for U.S. passenger fare receipts. Average passenger fares, which are developed from the survey, are multiplied by the number of foreign visitors on U.S. flag carriers from each major area or country, obtained from data from the INS, and the results are summed. In order to develop an adequate measure of average passenger fares, it was necessary to combine the average fares on both U.S. and foreign flag carriers, even though, in principle, only the average fare on U.S. flag carriers should be used in the estimates.

Although overall coverage is improved from the earlier BEA surveys, coverage of individual areas or countries in the new survey is highly uneven in quality. The unevenness is due in part to the voluntary participation of air carriers and cannot be compensated for fully in the estimation procedure. The unevenness is reflected in the overseas totals, which are the sum of the individual area and country estimates.

*Payments.*—For U.S. travel payments, average travel payments from each major area or country overseas, which are developed from the survey, are multiplied by the number of travelers to each major area or country, obtained from data from the INS, and the results summed. Information on single and multiple destinations of travelers, also developed from the survey, served as the basis for the allocation of expenditures abroad. For tours, an estimate of commissions paid to U.S. travel agents and tour operators was deducted before the computation of travel payments was made, and the airfare included in tour packages that was paid to foreign carriers was removed and placed in passenger fare payments.

For U.S. passenger fare payments, average passenger fares, which are developed from the survey, are multiplied by the number of travelers on foreign flag carriers to each major area or country, obtained from data from the INS, and the results summed. In order to develop an adequate measure of average passenger fares, it was necessary to combine the average fares on both U.S. and foreign flag carriers, even though, in principle, only the average fare on foreign flag carriers should be used in the estimates. Use of only the average fare for foreign flag carriers would have resulted in a substantial understatement of passenger fare payments. Like receipts, the overseas totals reflect the unevenness in quality of area and country detail.

The survey questionnaire for payments asks how much travelers departing the U.S. *intend* to spend while abroad; thus it is a survey of *intended* rather than of actual expenditures. The relationship between intended and actual expenditures is unknown. Consequently, for balance of payments purposes, the estimates of payments may be less reliable than those of receipts.

Because of the newness of the source data, the estimates are subject to considerable revision. Major problems occurred in establishing comparability of survey results before and after the first quarter of 1985, when procedures in USTTA's survey were changed.

<sup>2</sup> See the technical notes in June 1987 SURVEY for a description of this methodology.



Table 3.—Selected Service Transactions

(Millions of dollars)

Line		1986	1987	1988	Not seasonally adjusted					Seasonally adjusted				
					1988				1989	1988				1989
					I	II	III	IV	I*	I	II	III	IV	I*
1	Exports of selected services .....	70,886	79,405	92,058	21,087	22,042	25,340	23,591	24,087	21,799	22,405	23,432	24,422	24,867
2	Travel (table 1, line 5) .....	20,454	23,505	29,202	5,751	7,031	9,118	7,302	6,999	6,518	6,968	7,626	8,090	7,847
3	Passenger fares (table 1, line 6) .....	5,546	6,882	8,860	1,771	2,180	2,858	2,051	1,979	2,115	2,085	2,321	2,339	2,348
4	Other transportation (table 1, line 7) .....	15,458	16,989	18,930	4,605	4,769	4,800	4,757	4,944	4,675	4,769	4,710	4,776	5,014
5	Freight .....	3,969	4,700	5,345	1,370	1,372	1,289	1,315	1,481	1,370	1,372	1,289	1,315	1,481
6	Port services .....	10,480	11,575	12,830	3,054	3,209	3,319	3,248	3,281	3,124	3,209	3,229	3,267	3,351
7	Other .....	1,009	714	755	181	188	192	194	182	181	188	192	194	182
8	Royalties and license fees (table 1, line 8) .....	7,254	9,070	10,735	2,377	2,548	2,556	3,254	2,734	2,517	2,610	2,697	2,911	2,885
9	Affiliated, net .....	5,412	6,900	8,319	1,797	1,954	1,945	2,623	2,079	1,938	2,016	2,086	2,279	2,230
10	U.S. parents' receipts .....	5,518	7,049	8,431	1,831	1,980	1,964	2,656	2,104	1,984	2,043	2,103	2,300	2,265
11	U.S. parents' payments .....	106	150	112	34	26	19	33	25	46	27	17	21	35
12	Unaffiliated .....	1,842	2,171	2,416	580	594	611	631	655	580	594	611	631	655
13	Other private services (table 1, line 9) .....	22,174	22,959	24,331	6,583	5,514	6,008	6,227	7,431	5,974	5,973	6,078	6,306	6,773
14	Affiliated services, net .....	3,024	2,196	2,858	651	726	699	782	849	677	722	717	743	883
15	U.S. parents' receipts .....	5,375	5,106	6,168	1,453	1,523	1,491	1,702	1,674	1,491	1,542	1,501	1,634	1,717
16	U.S. parents' payments .....	2,351	2,910	3,310	801	797	792	919	825	814	820	784	891	836
17	Unaffiliated services .....	19,150	20,763	21,471	5,931	4,788	5,310	5,445	6,581	5,297	5,251	5,362	5,564	5,891
18	Education .....	3,480	3,804	4,111	1,628	540	1,010	934	1,787	994	1,003	1,062	1,053	1,097
19	Financial services .....	3,301	3,731	3,835	972	934	937	992	1,125	972	934	937	992	1,125
20	Insurance <sup>1</sup> .....	2,041	2,285	1,564	440	388	365	370	405	440	388	365	370	405
21	Telecommunications .....	1,827	2,105	2,357	564	579	597	618	640	564	579	597	618	640
22	Business, professional, and technical services .....	4,368	4,270	4,787	1,135	1,153	1,205	1,295	1,345	1,135	1,153	1,205	1,295	1,345
23	Other unaffiliated services <sup>2</sup> .....	4,133	4,568	4,817	1,192	1,194	1,196	1,236	1,279	1,192	1,194	1,196	1,236	1,279
24	Imports of selected services .....	59,281	67,455	73,073	16,158	18,984	21,167	16,764	16,652	18,538	17,798	18,142	18,596	19,176
25	Travel (table 1, line 20) .....	26,000	29,215	32,112	6,181	8,679	10,598	6,654	6,398	8,092	7,643	8,084	8,293	8,377
26	Passenger fares (table 1, line 21) .....	6,774	7,423	7,872	1,702	2,062	2,347	1,761	1,769	2,037	1,903	1,902	2,031	2,152
27	Other transportation (table 1, line 22) .....	16,715	18,062	19,641	4,883	5,005	4,923	4,830	4,964	5,033	4,995	4,826	4,787	5,144
28	Freight .....	10,687	10,999	11,841	3,042	3,022	2,895	2,882	2,839	3,042	3,022	2,895	2,882	2,839
29	Port services .....	5,201	6,360	7,059	1,671	1,799	1,837	1,753	1,933	1,816	1,788	1,741	1,714	2,103
30	Other .....	827	703	741	170	184	191	195	192	175	185	190	191	202
31	Royalties and license fees (table 1, line 23) .....	1,062	1,365	2,048	474	539	550	485	438	474	539	550	485	437
32	Affiliated, net .....	602	843	968	247	236	242	242	257	247	236	242	242	257
33	U.S. affiliates' receipts .....	171	240	238	41	56	63	78	74	41	56	63	78	74
34	U.S. affiliates' payments .....	773	1,083	1,205	289	292	305	320	331	289	292	305	320	331
35	Unaffiliated .....	461	522	1,080	227	303	308	243	180	227	303	308	243	180
36	Other private services (table 1, line 24) .....	8,730	11,390	11,400	2,918	2,699	2,749	3,034	3,083	2,902	2,718	2,780	3,000	3,066
37	Affiliated services, net .....	-1,284	-616	-694	18	-255	-245	-213	-211	18	-255	-245	-213	-211
38	U.S. affiliates' receipts .....	2,808	2,683	3,028	628	761	765	874	852	628	761	765	874	852
39	U.S. affiliates' payments .....	1,524	2,067	2,334	646	506	521	661	642	646	506	521	661	642
40	Unaffiliated services .....	10,014	12,006	12,094	2,899	2,953	2,994	3,247	3,295	2,884	2,972	3,026	3,212	3,278
41	Education .....	461	513	555	133	130	131	160	147	135	136	140	144	148
42	Financial services .....	1,769	2,077	1,656	342	387	435	492	489	342	387	435	492	489
43	Insurance <sup>1</sup> .....	2,201	3,168	2,781	727	688	677	689	735	727	688	677	689	735
44	Telecommunications .....	3,252	3,701	4,264	1,002	1,042	1,086	1,133	1,165	1,002	1,042	1,086	1,133	1,165
45	Business, professional, and technical services .....	1,252	1,425	1,646	389	402	413	442	426	389	402	413	442	426
46	Other unaffiliated services <sup>2</sup> .....	1,079	1,122	1,192	306	304	252	331	333	289	317	275	312	315

Table F.—Other Private Services, Unaffiliated

[Millions of dollars]

	1986				1987				1988			
	Receipts		Payments		Receipts		Payments		Receipts		Payments	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current
Total .....	9,393	19,150	7,252	10,014	10,851	20,763	8,406	12,006	11,224	21,471	8,716	12,094
Education .....		3,480		461		3,804		513		4,111		555
Financial services .....	1,656	3,301	1,874	1,769	2,232	3,731	2,443	2,077	1,966	3,835	2,057	1,656
Insurance <sup>1</sup> .....	479	2,041	1,406	2,201	690	2,285	1,634	3,168	833	1,564	1,922	2,781
Primary insurance, net .....		1,600		477		1,596		552		1,311		603
Reinsurance, net .....	479	441	1,406	1,724	690	689	1,634	2,616	833	253	1,922	2,179
Telecommunications .....	1,628	1,827	3,027	3,252	1,791	2,105	3,334	3,701	1,970	2,357	3,681	4,264
Business, professional, and technical services .....	1,614	4,368		1,252	1,690	4,270		1,425	1,704	4,787		1,646
Accounting, auditing, and bookkeeping .....		21		29		27		37		n.a.		n.a.
Advertising .....		94		77		108		140		n.a.		n.a.
Computer and data processing .....		985		32		629		61		n.a.		n.a.
Data base and other information services .....		124		25		138		28		n.a.		n.a.
Engineering, architectural, construction, and mining, net <sup>2</sup> .....	1,124	857		379	1,174	936		368	1,163	n.a.		n.a.
Installation, maintenance, and repair of equipment .....		973		466		1,023		506		n.a.		n.a.
Legal services .....		97		40		148		56		n.a.		n.a.
Management, consulting, and public relations .....		306		60		379		50		n.a.		n.a.
Medical services .....	490	490			516	516			541	541		
Research and development, commercial testing, and laboratory services .....		282		76		182		127		n.a.		n.a.
Other .....		139		70		184		52		n.a.		n.a.
Other .....	4,016	4,133	945	1,079	4,448	4,568	995	1,122	4,751	4,817	1,056	1,192
Wages of temporary workers .....	104	104	698	833	120	120	740	888	129	129	793	950
Film rentals .....	550	656	77	73	658	740	73	88	724	776	70	50
Expenditures of foreign governments and international organizations .....	3,006	3,015			3,293	3,332			3,487	3,504		
Other .....	356	357	170	173	377	376	182	186	411	408	193	192
Memoranda:												
Amount of change (current less previous) .....		9,757		2,762		9,912		3,600		10,247		3,378
New information .....		7,478		2,094		7,763		2,442		8,244		2,873
Transferred from other accounts .....		2,394		321		2,266		415		2,855		514
Revisions .....		-115		347		-117		743		-852		-9

n.a. Not available.

1. Insurance receipts are published net of losses paid, and payments are published net of losses recovered.

2. Engineering, architectural, construction, and mining receipts are published net of merchandise exports, which are included in the merchandise trade account, and net of outlays abroad for wages, services, materials, and other expenses.

Appendix B: Excerpts from report of Interagency Task Force on Services Trade Data on banking and financial services.

Limited data are available from existing reports. For U.S. insured commercial banks, "noninterest" income is collected on the [Federal Financial Institutions Examination Council] Call Report on a consolidated basis including overseas offices. Reported noninterest income is derived from a variety of activities, such as fees for fiduciary activities, data processing, consulting, payments and settlements services, and certain non-fee activities--namely, gains and losses from foreign exchange and from sales of assets. . . . Reported income represents the U.S. reporter's consolidated noninterest income, including that earned by the domestic bank and its U.S. and foreign offices.

For trade-in-services purposes, the information on noninterest income is of limited use as reported. Noninterest income attributable to international operations of U.S. commercial banks and booked at domestic offices (excluding International Banking Facilities in the United States) is available on a limited basis in supplemental reporting (Schedule RI-D, Part II, of the Call Report). No detail on the countries of residence of non-U.S. customers is available and no information is available on the specific types of noninterest income derived from international operations. Income on foreign exchange transactions is available, but only on a consolidated basis.

Noninterest income from foreign exchange transactions includes both capital gains and losses and fee-type income. Thus, the Call Report does not differentiate between a bank's gains from trading on its own account and implicit fees charged to its customers in the form of a differential between buying and selling rates. (It is something of an open question whether such a distinction is desired.)

Aside from the FFIEC reports by U.S. insured commercial banks, major gaps exist in reporting by other financial institutions. FFIEC reports on income are not filed by U.S. agencies and branches of foreign banks, or by bank holding companies and their directly owned affiliates.

In the absence of reported data on major financial services trade, the Commerce Department's Bureau of Economic Analysis (BEA) prepares estimates to enhance coverage of the U.S. international transactions accounts. Estimates are prepared for some noninterest receipts of banks and for payments and receipts of commissions and some other fees associated with securities transactions. The estimates are developed from information on the volume of transactions and appropriate fee rates.

Appendix C: Excerpts from report of Interagency Task Force on  
Services Trade Data on transportation services

U.S. receipts for passenger fares do not include tickets for international travel sold to U.S. travelers by U.S. airlines, since these are transactions between U.S. residents. U.S. payments only include purchases of tickets sold to U.S. residents by foreign airlines. Total two-way travel revenues by U.S. and foreign carriers are not reported.

Likewise, the full value of the U.S. shipping market is not available through balance of payments statistics. The transportation costs of: (1) U.S. imports carried by U.S. carriers and (2) U.S. exports carried by foreign carriers are not recorded in the balance of payments accounts because they are not transactions between U.S. and foreign residents by balance of payments concepts. However, information on the value of such transactions, which are substantial, particularly for exports carried by foreign operators, is essential for a complete estimate of the total value of transportation services related to U.S. foreign trade.

Attachment 4

**CENSUS BUREAU STATE-BY-STATE FOREIGN TRADE DATA:  
HISTORICAL PERSPECTIVES; CURRENT SITUATION; FUTURE OUTLOOK**

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## CENSUS BUREAU STATE-BY-STATE FOREIGN TRADE DATA:

### HISTORICAL PERSPECTIVES; CURRENT SITUATION; FUTURE OUTLOOK

#### Introduction

Placed in historical perspective, our quest for U.S. merchandise trade data (exports + imports) goes back to the earliest period of the Republic. The Treasury Department estimated the balance of trade as far back as 1790. Actual statistics based on export declarations first became available September 30, 1820. They were then -- as they are today -- a spin-off of the administrative process of recording commodity shipments at the various U.S. ports of call, which linked this country with the outside world.

#### STATE/REGIONAL AND OTHER SUBNATIONAL TRADE DATA

For nearly two centuries the trade data has dealt with measures of country-to-country commodity flow and traffic through the U.S. Customs districts and ports.

These days, however, the two most frequently asked questions about foreign trade statistics seem to be: "What were the commodity exports from my state, and what were the major imports consumed in my state?", and "Which industries in my state are exporting and which industries are consuming imported goods?" Most are shocked to find that the information doesn't exist. They ask, "Why?"

A brief explanation of WHAT subnational foreign trade data is available, WHAT is NOT available from the U.S. statistical system, and what COULD be made available, is what this paper is about.

While our merchandise trade (exports + imports) represented only 6.7 % (\$34.6 billions) of U.S. GNP (\$515.3 billions) in 1960; by 1988, our exports plus imports soared to \$780.4 billions, or 16 % of our Gross National Product (\$4,864.3 billions).

Only in recent years, has there been general interest in data gauging the impact of international trade on the states that produce exports and consume imports. In some measure, this "demand-pull" is a direct result of our expanding international trade, both in relative and absolute terms.

During the past decade the individual states have become increasingly aware of global economic integration and its

implications for them. Thus, with the growing significance of international trade, the lack of subnational statistics on merchandise trade has become a noticeable void in the analytical toolbox of state (and federal) agencies who track U.S. trade figures, in their attempt to establish what proportion of total U.S. trade "belongs" to any given region, state or locality.

We find we do not know how many exporters or importers there are in a state, whether they are big or small, whether they are part of a multinational organization, what commodities are produced and consumed, or what international partners are most involved in state-to-country and country-to-state merchandise trade.

Underlying this relatively recent demand for subnational trade data is, of course, the chronic and substantial U.S. national trade deficit which has been of increasing concern to U.S. policymakers throughout the better part of two decades.

Doubtless, this concern will persist into the foreseeable future.

These global economic trends and their international trade ramifications touch all geographic areas of the country, and make it relevant to raise questions that few were concerned about in the past.

For example, at the state and local level, those involved in export promotion programs and those interested in import penetration want to know:

1. What and how much do we export/import?
2. Where do these exports go?
3. Where do these imports come from?
4. How many exporters/importers are located in our area?

These data users frequently express surprise -- and at times accompanied by consternation -- that the Commerce Department does not have a full array of marketing data "on the shelf" for instant analysis. With today's technology, one is led to believe that a Federal agency can retrieve, with "push button" efficiency, the much-sought-after tabulations of subnational merchandise trade statistics.

Viewed superficially, it appears an easy task to have "clean" state-by-state data on any state's exports and/or imports, by country of origin or destination, preferably on a month-to-month basis (with little or no time lag), at 10-digit commodity classification detail.

A more in-depth examination of the administrative process of recording international commodity shipments reveals that the

system was not structured to identify or regulate firms and establishments engaged in producing or consuming commodities. The administrative process was designed to regulate shipment of merchandise into or out of the country. The statistics gathered from the administrative records reflect these concepts.

Although, the U.S. Customs Service does collect a vast and detailed amount of merchandise trade data pertaining to the traffic of commodities coming into, and going out of this country from its 43 Districts [as imports and exports], that does not necessarily mean the exact state or local geographic configuration desired by today's data users can immediately be made available from this data. Customs Districts are not coextensive with state boundaries.

Furthermore, the shipments that U.S. Customs monitors -- in large part -- are not tracked from the "country of origin" to the ultimate consumer" (in the case of imports). And in the case of exports, they are often not recorded from the "point of production" to the "ultimate destination" overseas. The producer, or assembler is not necessarily the exporter. Likewise, the manufacturer, wholesaler, or retailer is not necessarily the importer. Moreover, there is nothing on the administrative records that regulate exports, that distinguishes exporters that produce the commodity from those that distribute it. Similarly, the import document does not necessarily contain information about the ultimate consumer.

The movement of goods BEFORE they are determined to be "for export", and AFTER imports enter domestic channels of distribution, are beyond the purview of U.S. Customs Service record keeping. Within the U.S., interregional commodity movements are not recorded as exports or imports when they cross state borders. In brief, the same Federal administrative rules that apply to the movement of goods between the United States and other countries do not apply in the realm of interstate commerce. The latest data on the interstate movement of manufactured goods comes from the 1977 Commodity Transportation Survey. The survey did not, however, distinguish between goods for domestic consumption and goods for export. Cost, response burden and problems with methodology have precluded more recent updates.

Suffice to say, that currently, there exists a paucity of accurate and reliable empirical commodity flow data about merchandise shipments by state (i.e., before they come within the scope of the U.S. Customs information gathering system, or after they leave it).

So the next best question: What IS currently available?



## CENSUS BUREAU STATE-BY-STATE FOREIGN TRADE DATA

The concept of origin seems simple. The route from the mine to the consumer may, however, have many detours and many points can be considered to be "the origin" of exports. In manufacturing, for instance, not all products that are manufactured are in the final form the export takes. Raw materials go into the fabrication of parts. Parts are assembled into a product. (Frank Purdue's chicken parts aside!) The manufacturer is not always the exporter. The product may be sold to one or more wholesalers or brokers.

In agriculture and the minerals industries identical products within a shipment may not be segregated for domestic or export use until they reach the last broker. Early participants in the production and distribution channels may not know which product is for export and which isn't.

On the import side, the concept of destination also seems simple, but a similar phenomenon of "many destinations" may occur. For instance, parts or raw materials are imported by a wholesaler. They are transported to a warehouse and mixed with similar items of domestic origin. The items are purchased by a wholesaler who sells them to an assembler. The final product may be a mixture of imported and domestic origin components. A manufacturer, wholesaler, retailer, other business or an individual may buy the product. Those down the chain of distribution from the original importer may not know which product was imported and which wasn't.

Determining origin or destination is a process of linking each commodity shipment to the establishment that produced or consumed it. Since there are no administrative records that track the domestic movement of commodities, that part of the linking process must be done by statistical survey. The one time cost of a survey that would produce reliable data at the state level is about twice the current annual budget for all foreign trade statistics.

Although no funds have ever been appropriated nor are any currently appropriated for any origin and destination statistics, several studies have been done on a reimbursable basis. The concepts used reflect the sponsor's interests.

Over the past two decades the following concepts of origin and destination have been used in Census Bureau, foreign trade statistics:

1) Domestic and International Transportation of U.S.  
Foreign Trade

[Exports: by State where grown, produced or assembled;  
Imports: by State where transported for sale or use]

In 1957, the U.S. Corps of Engineers requested Census to undertake (on a reimbursable basis) a survey of selected commodities comprising principally "liner" type commodities and some "bulk" commodities in the United States export and import waterborne trade. [This survey was designed to furnish part of the data needed for a report on the Great Lakes harbors being made by the U.S. Corps of Engineers, in response to a Congressional directive with an objective to improve the harbors of the Great Lakes and the St. Lawrence Seaway.]

Questionnaires were mailed to the importers and exporters whose names appeared on the Import Entries and Shipper's Export Declarations to obtain certain facts concerning the specific transactions. [The U.S. Customs Service's Import Entry Summary (Form 7501) is the source of U.S. merchandise imports, while the U.S. Commerce Department's, Shipper's Export Declaration (SED) is the source of official government statistics on U.S. merchandise exports.]

The major fact requested from the exporter was the interior point where the goods reached the form in which they were exported, i.e., where they were grown, produced, assembled, or last materially altered; and from the importer, the major fact requested was the interior point to which the goods were physically transported for further processing, for sale, or for use by the importer. Information also was requested concerning type of transportation mode and nature of source of supply or use of the product. The objective of the study was to provide transportation information, and all the statistics presented were therefore based on tonnages.

The general method used in the survey involved a stratified probability sampling of 1956 export and import selected commodity shipments through all United States ports. The primary purpose for undertaking the survey was to obtain data that would be useful for estimating the potential volume of shipments through the St. Lawrence Seaway. The sample of movements necessarily had to be drawn from export shipments through all United States ports because there was no satisfactory basis for defining in advance the area that is tributary to the Great Lakes.

Similar, but more comprehensive surveys were conducted in 1970 and in 1976. The studies were published about 2 1/2 years after the reference year, containing no establishment data, and with

only 2-digit commodity detail. Cost has precluded more recent updates.

## 2) Exports from Manufacturing Establishments

[Exports: by State where goods are produced.]

Another early source of Census statistics on the role of the states in U.S. export trade, has been the Industry Division's report on the "Exports From Manufacturing Establishments" This series was formerly titled, "Origin of Exports of Manufactured Products". The series was sponsored by the International Trade Administration of the Commerce Department, and conducted on a reimbursable basis through 1981.

Manufacturers reporting in the Annual Survey of Manufacturers (ASM) --about 60,000 plants -- were requested to "report the value of products shipped for export." Such directly reported exports understate the true value of all exports because many respondents do not know the final destination of the products produced in their plant. In order to provide a more accurate measure of the overall importance of exports industrially and geographically, the directly reported values were adjusted to include estimates of the exports of manufactured products by wholesalers, exporters, etc. Data from the ASM were adjusted to reflect the totals derived from official export data compiled from the Shipper's Export Declarations (SEDs).

The general method used, was to convert the SED based data to data that reflects the ASM concepts and report manufactured exports at the production origin.

The following characteristics apply to this data series:

a) Because the Annual Survey of Manufacturers (ASM) measures only domestically manufactured exports, re-exports were not included in the estimates;

b) The ASM does not include production in the Virgin Islands or Puerto Rico. Exports from these areas were not included, but the SED based data were adjusted to reflect trade between the U.S. and these territories. Other territories of the U.S. are also excluded from both the ASM and SED based sets of data;

c) The commodity classification used on the Shipper's Export Declaration (SED) is the Schedule B, 7-digit system. The Bureau of Economic Analysis assigned the data to 6-digit Input-Output (I-O) commodity classifications. The SED data were collected on a free alongside ship (f.a.s.) basis, thus included

freight and wholesale margins. To make the SED-based data comparable to the ASM-based data, the margins were subtracted to derive a "free on board" (f.o.b.) plant value. The 6-digit commodity margin rates from the benchmark I-O study were applied to the SED based data to derive the f.o.b. plant value of exports;

d) The merchandise export data were converted to an SIC basis, using the latest available Census of Manufactures data on the distribution of product shipments by industry classification; and,

e) The differences between these national estimates of export shipments (SED-based) and reported shipments of manufacturing establishments (ASM-based) were then allocated to geographic areas at the 3-digit SIC level, and added to the total f.o.b. value of exports of manufacturing establishments by state as reported in the Annual Survey of Manufactures (ASM).

Last January (1989), the Census Bureau announced the availability of the latest report covering the years 1985 and 1986. The report provides state-by-state estimates of the value of exports produced by manufacturing establishments in those states. It was first produced in the early 1960s with updates about every three years. It is now an annual report. It also provides estimates of direct and supporting exports, and the number of employees involved in the production of U.S. exported goods.

Currently, it is perhaps our most reliable export data series available on manufacturing establishments engaged in exporting.

However, some drawbacks of this series as far as state export promotion is concerned, are: the export survey results appear in hard copy only after an approximate 2 1/2 year lag (with only 2-digit SIC level of detail for manufacturing establishments); it measures exports only, not imports; it measures the commodity at the establishment, not port nor destination; and it factors out the distribution (wholesalers) activity, allocating those margins back to the processing plant. Also, it does not include data for establishments engaged in exporting commodities produced by the agriculture, minerals, forestry and fishing sectors of the economy.

### 3) .Origin of Movement of Commodities

[Exports -- by State where the merchandise began its export journey.]

Responding to data user requests, the Foreign Trade Division of

the Census Bureau in December 1985, added a "state of origin" inquiry to the Shipper's Export Declaration (SED).

The instructions that accompany the SED define the "point (State) of origin" as "a) The two-digit U.S. Postal Service abbreviation of the STATE IN WHICH THE MERCHANDISE ACTUALLY STARTS ITS JOURNEY TO THE PORT OF EXPORT, or b) the state of the commodity of the greatest value, or c) the state of consolidation."

The "origin of movement" totals were determined by sorting the Shipper's Export Declarations -- about 9.7 million transactions in 1987 -- by the state reported as the point where the commodity became an export. Summary statistics were developed by commodity classification (SITC), by industrial classification (SIC), by geographic location (region, state, port, country of destination), for value or quantity by method of transportation. The data provided information to the transportation industry on the flow of commodities between the "pick-up point" and the port.

During 1987, a group of subscribers funded a one-time special tabulation detailing exports by "State of Export" [2-digit, Standard Industrial Classification (SIC)] for that year; "Region of Export" [4-digit, Standard International Trade Classification (SITC)]; and, "Port of Export" including total dollar value of exports by all modes of transportation from the various U.S. ports, at a cost of \$6,400 for all three series. This same level of detail is now available, beginning with 1988, at \$200 per quarter for each of the three series.

Aside from the above, aggregate state export/import data was also made available for 1987 and 1988. These tabulations appeared in the Census Foreign Trade publication entitled: FT-990 "Highlights of U.S. Export and Import Trade," in 1987. To speed release of the 1988 data, the tabulations were transferred to the publication, "Summary of U.S. Export and Import Merchandise Trade, FT-900.

The data were tabulated on an "as reported" basis. About 25% of the shipments contain no state code defining the point of origin of movement. The industrial classification is based on concordances between the Schedule B classification and the Standard Industrial Classification (SIC). The Schedule B commodity classification system is based on merchandise content. The SIC is a system for classifying domestic establishments by principal industrial activity (process).

In some cases there is exact concordance; in others the relationship is tenuous at best.

[The state aggregate IMPORT statistics were published during 1987

and 1988, but were subsequently dropped, pending improvements in collecting methodology.]

#### COMPARING THE DIFFERENCES: Census Export Trade Data Series

[Industry Division/Foreign Trade Division]

The question frequently arises:

Can the COMMODITY based data and the ESTABLISHMENT based data be usefully compared and/or reconciled? [i.e., the state export data published in the Industry Division's, "Survey of Manufactures", and the state export statistics, by the Foreign Trade Division].

Since the Industry Division's next publication on exports will cover the year 1987, the question arises: "Will we be able to compare the 1987 'Exports from Manufacturing Establishments' data, to the data already released for 1987 in the 'Origin of Movement' series?"

Comparability problems arise, in that the Foreign Trade Division's series on origin of movement and the Industry Division's series on the exports of manufacturing establishments draw on different sources for their DETAILED data. Thus, they are not directly comparable at the state level.










Although, both use the official U.S. export statistics as an aggregate base, the dollar values published in the Foreign Trade Division series are on an "f.a.s." (free alongside ship) basis, and therefore INCLUDE all wholesale costs and all other costs incurred in transporting the commodity to the port of export.

Unlike the Foreign Trade Division's state export series, the dollar value of exports in the Industry Division survey of manufactures is "f.o.b." (free on board) plant.

Also the Foreign Trade Series, includes ALL commodity exports (e.g., agriculture, mining, minerals, etc.), while the Industry Division export survey data --as noted earlier -- does not.

The following illustrates how the two data series would record the "state of origin," and the value of commodity shipments in three different situations:

EXAMPLE 1 shows the manufacturer as the exporter. The Industry Division series would record the transaction as a \$10.00 value in

State A	State B	State C
<p>Exports from manufacturing establishment</p>  <p>Manufacturer</p> <p>Value F.O.B. \$10.00</p> <p>Origin of movement</p>	<p><u>Example 1</u></p>  <p>Transportation cost \$0.80</p>	 <p>Port</p> <p>Value F.A.S. \$10.80</p>
 <p>Manufacturer</p> <p>Value F.O.B. \$10.00</p>	<p><u>Example 2</u></p>  <p>Wholesaler</p> <p>Value F.O.B.</p> <p>Transportation cost \$0.40</p> <p>Origin of movement</p>	<p>Transportation cost \$0.40</p>  <p>Port</p> <p>Value F.A.S. \$11.30</p> <p> <math display="block">  \begin{aligned}  &amp;\\$ 10.00 - \text{F.O.B. Manufacturer} \\  &amp;+ 0.40 - \text{Transportation cost} \\  &amp;+ 0.90 - \text{Wholesale markup} \\  &amp;\\$ 10.90  \end{aligned}  </math> </p>
 <p>Farm</p> <p>Value F.O.B. \$10.00</p>	<p><u>Example 3</u></p>  <p>Wholesaler</p> <p>Value F.O.B. \$10.90</p>	<p>Origin of movement</p>  <p>Port</p> <p>Value F.A.S. \$11.30</p>

State "A". The Foreign Trade Division series would record the transaction as a \$10.80 value in State "A". The difference in value represents the cost of transportation from State "A" to the port of export in State "C."

EXAMPLE 2 shows the wholesaler as the exporter. The Industry series would record the transaction as a \$10.00 value in State "A". The Foreign Trade series would record the transaction as a \$11.30 value in State "B". The difference in value represents the cost of transportation from State "A" to the port of export, PLUS the wholesaler's margin.

EXAMPLE 3 shows the wholesaler as the exporter. The transaction would not be included in the Industry Division's series, since the commodity (grain) was GROWN, not manufactured. The Foreign Trade series would record the transaction as a \$11.30 value in State "C", since the exporter determined that the decision to export the grain was made at the port.

For the reasons cited above, it becomes clear that the Foreign Trade Division (FTD) magnetic tape export data series, does not DIRECTLY correlate with the "Origin of Exports of Manufactured Products" (or the "Exports From Manufacturing Establishments; the series' new title).

[Note: Conceptually they do correlate in Example "A", but they have different values because of FOB/FAS differences.]

#### DATA LIMITATIONS AND SOURCES OF ERROR

Factors influencing the accuracy of data may originate from a variety of sources. Among these are, failure to file, errors in the reporting and/or processing of information relating to commodity classification, net quantity, value (CIF/Customs Value in the case of imported goods), and other statistical aberrations. To minimize errors, the procedures used in compiling the statistics include clerical and computer processing checks to improve reliability of the data to the extent practicable.

Among the most important constraints which have precluded earlier development of regional, state and local trade data series from U.S. Customs records, include:

- 1) The nature of the collection process poses serious difficulties in accurately assigning U.S. merchandise trade by state. For example, as earlier stated, U.S. EXPORTS are entered or recorded in the Shipper's Export Declaration (SED) -- usually by a broker -- at the port of exit or shipment from the United



States. In this instance, the state where the manufacturer is located and the state where the export journey of the specific commodity began, may not be the same.

2) Lack of adequate funding (the Census Bureau has requested geographic series trade data enhancement funds for a number of years, without success); and,

3) Information that could be gleaned from foreign trade transactions was severely limited for many years by the Bureau's ability to manipulate the number of records and the amount of data on those records. The Foreign Trade Division was one of the first to computerize their processing on the first commercial computer, Univac I. At the Bureau, the Foreign Trade programs were major consumers of available computer capacity. The programs were upgraded to the Univac 1103 and 1105 in the 1960s, and to the 1107, the 1108 and the 1110 in the '70s. Memory was expensive and processing turnaround-time of 24 hours was the fastest that could be expected at that time. In 1979, the Bureau acquired a Univac 1184.

This, coupled with the Bureau's recent procurement of Digital Equipment Corp. minicomputers, hundreds of microcomputers, networked systems, cheap memory, lightning fast microprocessors and sophisticated data base software have greatly enhanced our ability to manipulate and match extremely large data sets. Fortunately this happened at the same time as the focus on international trade data has been renewed and new data collected.

#### NEW DEVELOPMENTS; FUTURE OUTLOOK

In view of the national interest directed toward the augmentation of U.S. merchandise exports, the Bureau is developing a nationwide exporter data base.

The Exporter Data Base (EDB) will include all Shipper's Export Declaration (SED) records processed, beginning in 1987 and all establishments that reported export activity on their 1987 Economic Census questionnaire. It will link all commodity records filed by the exporter to the Census establishment record.

The establishment record contains the SIC code, number of employees, name, and address (including ZIP code) of the physical location of the exporter. About 95,000 U.S. establishments reported some export activity in 1987. The data records for these establishments will be linked to the data records of the 9.7 million SEDs filed in 1987.

SED records contain information about commodities exported,

including the commodity classification, country of destination, Customs district and port of embarkation, ZIP code of the exporter, value (f.a.s. basis), shipping weight, quantity, method of transportation, whether the cargo was containerized, and whether the transaction was made between plants of the same firm.

Multiunit establishments that reported export activities will be linked to the enterprise record that contains the characteristics of the parent firm of the multiunit establishment. Linking these multiunit establishments to associated enterprise records will provide company level information about the firms that own and operate the establishments engaged in exporting. This includes the mailing address of the enterprise, whether a foreign company owns it, whether it has foreign affiliates, and its foreign country code. It also provides data on the total employment of the enterprise and the total number of establishments owned and operated.

Once established, the EDB will be a static data base. The linked records will be used to produce tabulations by state or metropolitan area in various ways. The data base will also be the source of firm and establishment characteristic information for quarterly tabulation of imports and exports by state. It will be the source of various special tabulations of exporter characteristics. It also will serve as a research tool to determine which firms are not filing complete export documents.

Premised on the availability of funding (\$500,000 per year) the EDB will be updated on an annual basis after the Annual Company Organization Survey (COS) is complete. In the update process, we will identify changes to the name, address, company affiliation, size codes or other establishment-based information, and obtain current establishment-level data for exporters from the COS and Annual Survey of Manufactures (ASM). We will flag inactive establishments for deletion. We will be able to identify new exporters by matching the EI numbers reported on export documents processed during the year to the EDB and match the EI to the Standard Statistical Establishment List (SSEL) to obtain the corresponding establishment and firm record. The changes (additions and deletions) will be the basis for creating a new EDB each year.

As can be noted above, the basic means of linking the export record to the establishment, will be through the Employer Identification (EI) Number. The EI is a nine digit number used by a firm to report payroll withholding to the Treasury Department. The EI is also the Exporter's Number on the Shipper's Export Declaration.

The following purposes and objectives will be served by the Exporter Data Base:

- 1) The EDB will be used as a basis for information required for the International Economic Data System established by the Omnibus Trade and Competitiveness Act of 1988;
- 2) It will provide accurate and timely measures of export activity on a state-by-state basis, a high priority of the National Governors' Association, District Export Councils, and Port Authorities nationwide;
- 3) It will provide statistical measures of export activity needed to target export promotion programs, such as "Export Now";
- 4) It will provide commodity detail on trade between affiliates needed for the Bureau of Economic Analysis 1987 benchmark of the Survey of Foreign Direct Investments.
- 5) It will provide correlations between the "Export from Manufacturing Establishments" series of data and the "Origin of Movement of Commodities" series.

#### IMPLICATIONS OF NOT DEVELOPING A NATIONAL EXPORTER DATA BASE

The need for information about U.S. exporters has grown in direct proportion to the U.S. position in the global marketplace. The slippage in the U.S. trade deficit since 1981 has been a major source of increased export earnings of U.S. trading partners and a powerful stimulus to their national output. It has also been of major long term concern to the U.S. international economic position and its ability to retain a viable long run two-way trade relationship with its world trading partners.

The Exporter Data Base addresses one of the highest priorities of the National Governors' Association. Recently, this resolution was unanimously endorsed by the governors calling for more timely and accurate trade data. The Commerce Department urgently needs information on exporter characteristics for its export promotion programs.

The implications of not taking immediate action translates into a continuing waste of perhaps millions of dollars at the Federal and state levels by the failure to have critical information, necessary to target vital U.S. export promotion programs.

Currently, the individual states pursue most programmatic export promotion efforts without sufficiently reliable data on the comparative importance of existing trade relationships among

their resident industries, and without a systematic basis for longer term strategies. To date, the absence of detailed and timely data has precluded important research and analysis of state and regional participation in foreign trade.

The Exporter Data Base will collect no new data and will impose no additional reporting burden on exporters. It will merely match data collected about establishments to data collected about commodities and thereby provide new information. The new information will link and provide quantitative data based on all of the origin concepts; where produced, where sold, where the export journey began, and port-to-country of destination.

#### DESTINATION OF IMPORTS

Information on the destination of imports is another matter.

We know which foreign countries produce the commodities we import. We know which domestic industries mine, grow or manufacture these same commodities. We can determine the effect imported goods have on domestic producers and which industries in which states are most affected by foreign competition.

What we do not know is which industries in which states consume imported goods. The available data on consumption and purchases is not collected in that detail and no distinction is made between goods of imported or domestic origin.

Until certain information on the destination of imports can be added to the U.S. Customs Service Import Entry Summary form, and information on the purchase and consumption of imported goods can be collected from establishments by Census, there is little hope of obtaining accurate "ultimate destination" data.

#### ERRONEOUS CONCLUSIONS DRAWN FROM CURRENT TRADE DATA

In view of the statistical considerations and problems cited above, caution is advised when drawing from the geographical trade data currently published.

Indeed, one of the more tenuous conclusions to be drawn from this data, is the attempt to deal with the elusive concept of "designating" any given state a "winner" or "loser" by having either a foreign trade "surplus" or "deficit", based on currently available trade data.

This is a particularly distressing assertion, when taking into account the myriad variables involved in the production,

processing, shipment and trans-shipment of the merchandise or the state that is being "measured", "analyzed" or "evaluated."

For example, during early 1988, a midwest newspaper's business section highlighted the trade "surpluses" and "deficits" of various states. In so doing, the story also should have highlighted the pitfalls clearly evident in this approach.

The article, however, fails to point out, the limitations of the statistical data from which these conclusions are drawn.

Excerpts from the article state: "Wisconsin finished 1987 with the 8th best foreign trade balance among states ..." "... In only 16 other states did exports exceed imports ..."

Nor was mention made, that even were the statistical tables free of all error, no account is taken of the "value-added" to the product, from either neighboring states or from foreign countries (e.g., Mitsubishi engines imported from Japan for assembly in the U.S., etc.). Unfortunately, from the viewpoint of statistical reliability (and data user desirability), most export or import goods are not tracked in terms of specific geographic location in such a vast "common market", as the United States represents.

Let it be said that the above examples are not the most egregious mis-applications of U.S. Census/Customs export/import statistics. Recently in the state of Ohio, it was learned that an "analysis" was conducted, which yielded a state "trade deficit" on a per-capita basis!

#### SUMMARY

While state-by-state trade statistics have been an elusive goal for many years, new data coupled with recent innovations in computer technology promise that the goal can be reached within the next year, as far as export data is concerned.

Lack of available data to determine import penetration at the state level, still places this goal beyond empirical reach.

#### ADDENDUM: Definition of Terms

#### REFERENCES: U.S. Census Bureau Publications

## DEFINITION OF TERMS

**EXPORTER** -- The principal party responsible for effecting export from the United States, as named on the validated export license.

**STATE OF SHIPMENT** -- The state in which the merchandise actually starts its journey to the port of export or the state of the commodity of the greatest value in the case of combinations or the state of consolidation.

**COUNTRY OF ULTIMATE DESTINATION** -- The country in which the merchandise is to be consumed, further processed or manufactured; the final country of destination as known to the exporter at the time of export; or the country of ultimate destination shown on the export license. The country of destination data are in terms of Schedule C-E, "Classification of Country and Territory Designations for U.S. Export Statistics."

**CUSTOMS DISTRICT FOR EXPORTS** -- Export shipments are credited statistically to the Customs district through which the shipment clears when it leaves the United States. Therefore, the Customs District shown is not necessarily the district in which the merchandise was grown, manufactured or otherwise originated. U.S. Customs districts are based on Schedule D, "Classification of U.S. Customs Districts and Ports for U.S. Foreign Trade Statistics." A table showing U.S. coastal areas in the Customs districts and ports included in each appears in Section 13 of the "U.S. Foreign Trade Statistics Classification and Cross-classifications."

**EXPORT VALUATION** -- The dollar value is equivalent to a f.a.s. (free alongside ship) value at the U.S. port of export, based on the transaction price, including inland freight, insurance and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation.

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